

Listing of Claims

1. Canceled
2. (Currently Amended) The method according to claim 19, further comprising the steps of amplifying the polymorphous DNA microsatellite marker from the offspring of the afflicted individual and comparing the length of the amplified marker with the length of the amplified polymorphous DNA microsatellite markers from steps (a) and (b) .
3. (Previously Presented) The method according to claim 19, further comprising the steps of amplifying two or more different polymorphous DNA microsatellite markers from the tumor and the blood.
4. (Withdrawn) A method for determining whether an offspring of an individual afflicted with a tumor suppressor gene disease has an increased risk of developing the tumor suppressor gene disease comprising the following steps:

- a) making available a tumor material of an afflicted individual who is suffering from the tumor suppressor gene disease,
- b) making available the blood of the afflicted individual,
- c) isolating the tumor DNA from the tumor material,
- d) isolating the blood DNA from the blood,
- e) amplifying at least two polymorphous DNA microsatellite markers from the tumor material,
- f) amplifying the polymorphous DNA microsatellite marker from the blood,
- g) separating by length the polymorphous DNA microsatellite markers from the tumor material,
- h) separating by length the polymorphous DNA microsatellite markers from the blood,
- i) observing the length of the polymorphous DNA microsatellite markers from the tumor material,
- j) observing the length of the polymorphous DNA microsatellite markers from the blood, and
- k) determining the allele which is lost in the tumor.

5-7. Canceled.

8. (Currently Amended) The method according to ~~claim 4 or~~
claim 19, ~~where the two polymorphous markers, of which~~
~~there are at least two, preferably have~~ wherein the
polymorphous DNA microsatellite marker has a length of up
to approximately 300 bp.

9. (Currently Amended) The method according to ~~claim 4 or~~
claim 19, wherein at least three, or preferably four,
different markers are used.

10. (Currently Amended) The method according to ~~claim 4 or~~
claim 19, wherein the marker is a ~~neurofibromatosis gene~~
~~flanking or intragenic~~ tumor suppressor gene disease
marker.

11-13. Canceled.

14. (Currently Amended) The method according to ~~claim 4 or~~
claim 19, wherein the afflicted individual is a parent of
the offspring.

15-18. Canceled

19. (Previously Presented) A method for determining whether an offspring of an individual afflicted with a tumor suppressor gene disease has an increased risk of developing the tumor suppressor gene disease comprising the steps of:

- a. amplifying one or more polymorphous DNA microsatellite markers for the tumor suppressor gene disease from a tumor of the afflicted individual;
- b. amplifying the one or more polymorphous DNA microsatellite markers from the blood of the afflicted individual;
- c. comparing the amount and length of the one or more amplified polymorphous DNA microsatellite markers from steps (a) and (b);
- d. establishing the loss of an allele in the tumor of the afflicted individual, based on the comparison in step (c);
- e. amplifying the one or more polymorphous DNA microsatellite markers from the blood of an offspring of the afflicted individual; and
- f. determining which allele of the afflicted individual was inherited by the offspring, wherein

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inheritance of the allele that is retained in the tumor of the afflicted individual indicates an increased risk of developing the tumor suppressor gene disease.